

Remarks

The record has established that the primary '805 reference, upon which all rejections are based, fails to teach or suggest multiple limitations in each of the independent claims. Despite Applicant's traversals, the Office Action has ignored this lack of teaching as asserted in the primary '805 reference, as well as in the secondary '289 reference, contrary to M.P.E.P. § 707.07(f). The Office Action's assertions regarding alleged teachings in the secondary '168 reference are also erroneous, because the cited ID-based arbitration unit bears no relationship to the claimed timing-based comparison of release signals. Moreover, the proposed combination of references would replace the timing-based comparison in the '805 reference and with an identification-based comparison, thus resulting in operation under timing-fault conditions (and rendering the '805 reference inoperable for its purpose of avoiding such operation). The following addresses these and other matters in greater detail.

The instant Office Action indicated that claims 1 and 11-12 stand rejected under 35 U.S.C. § 103(a) over the Belschner '805 reference (U.S. Patent No. 7,103,805) in view of the Kleveland '168 reference (U.S. Patent No. 5,528,168); claims 3-11, 13, and 15-16 stand rejected under 35 U.S.C. § 103(a) over the '805 reference in view of the '168 reference, and further in view of the Riley '289 reference (U.S. Patent No. 5,706,289); claims 2 and 12 stand rejected under 35 U.S.C. § 103(a) over the '805 reference in view of the '168 reference, and further in view of the Baek '554 reference (U.S. Patent No. 5,680,554). The Office Action also suggests adding section headings to the Specification. Applicant traverses all of the rejections and, unless explicitly stated by the Applicant, does not acquiesce to any objection, rejection or averment made in the Office Action.

All claim rejections are improper because the Office Action has failed to assert correspondence to multiple claim limitations in each of the independent claims, and because the interpretations of the cited references are erroneous. For instance, claim 1 is directed to a communications unit, a bus monitor and a bus driver, where the communications unit and bus monitor each independently generate release signals, and where the bus driver compares the release signals. The Office Action has asserted no correspondence to the bus driver, and the cited diagnostic unit does not correspond to the claimed communications unit as asserted. Specifically, the Office Action has erroneously that the diagnostic unit in the '805 reference corresponds to the claimed communications unit, and that the cited "trigger" (or

“retrigger”) corresponds to the claimed release signal (*see*, Col. 2-3). These assertions are erroneous because the cited diagnostic unit does not generate any trigger and thus does not correspond to the claimed communications unit (which generates a release signal). These assertions are further erroneous because the cited “retrigger” at column 3:13 is compared to a time pattern generated by a “time registering means” (*see*, Col. 3:6-9), and is not compared to any signal generated by the cited diagnostic unit (*i.e.*, the diagnostic unit does not generate a retrigger signal). Accordingly, the cited bus monitor and diagnostic unit do not generate signals as asserted in the Office Action, and the ‘805 reference correspondingly does not compare any generated signals as claimed.

Further regarding the cited “trigger” signal, the alleged correspondence to the claimed release signal is illogical because only a single trigger is generated, whereas the claimed invention is directed to the generation of two release signals that are compared. Referring to column 3:6-16, the time-registering means provides the time pattern (defined by trigger signals), and it is only the cited bus monitor unit that retriggers in response to the time pattern. The cited diagnostic unit never retriggers, and instead uses the time pattern to determine whether the bus monitor properly retriggers (*see, e.g.*, Col 3:13-16). As only a single trigger is generated in the ‘805 reference, no comparison can be made as claimed in the instant application (*i.e.*, the alleged “comparison” is only based upon the alleged time pattern itself, and not upon different signals that are generated from the time pattern). As applicable to the rejection of claim 11, the cited “watchdog” thus also fails to compare any signals from the diagnostic unit, as the diagnostic unit does not generate a trigger. Moreover, the cited retrigger and the time pattern (initial trigger) are not independently-generated as the claimed release signals are, because the retrigger is actually based upon the time pattern (and initial trigger).

In addition to the above, the cited portions of the ‘168 reference do not provide correspondence to limitations directed to blocking network access based upon the coincidence (timing) of signals as asserted in the Office Action. That is, the Office Action acknowledges that the ‘805 reference does not teach blocking the access of the network node in the event that two release signals do not coincide, and then goes on to cite portions of the ‘168 reference as allegedly providing correspondence to these limitations. However, the cited “arbitration logic” 510 does not operate based upon any “coincidence” of signals,

and is instead based upon matching identifications. For instance, the “comparison circuit” 540 “compares device identification bits 535 to master identification bits 525,” but this comparison has nothing to do with coincidental signals (*i.e.*, has nothing to do with timing). Accordingly, the Office Action’s assertion that the cited ID comparison involves determining timing coincidence is untenable.

In addition to the above, the proposed combination of references is improper because the combination would render the ‘805 reference inoperable for its purpose (*see, e.g.*, M.P.E.P. § 2143.01, and *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984) (A §103 rejection cannot be maintained when the asserted modification undermines purpose of the main reference.)). That is, replacing the retrigger comparison of the ‘805 reference with an arbitration scheme based upon the ID of the bus agent sending the request would result in blocking or allowing bus access regardless of any timing-related conditions (*i.e.*, as long as the ID matches). Moreover, the use of an ID comparison in the ‘168 reference involves controlling access by separate bus agents, whereas the ‘805 reference controls access internally to a specific, central node. Accordingly, modifying the ‘805 reference as asserted would render it inoperable for internal monitoring at a central node, in direct contrast to the purpose of the ‘805 reference.

In view of the above, the Section 103 rejections of independent claims 1, 11 and 12 are improper and should be removed. The rejections of all dependent claims are therefore also improper (where a Section 103 rejection of an independent claim is improper, the corresponding Section 103 rejections of the claims that depend therefrom are also improper).

Applicant further traverses the Section 103 rejections because the Office Action has failed to cite teaching or suggestion of various limitations in the dependent claims, some of which are addressed in the following. Regarding claim 3, the cited “element” 445 and 446 in the ‘289 reference does not appear to show any inverse coding as each “element” appears respectively to refer to a node at which an output 451 of a flip-flop 450 and a clock signal are provided (*see, e.g.*, Col. 22:3-45). Generally, the rejection is vague and unclear as to what is being asserted as teaching or suggesting inversely-coded signals and, specifically, inversely-coded trigger signals as modified in the ‘805 reference; the cited portions of the ‘289 reference appear unrelated to the ‘805 reference and the Office Action’s asserted

teachings. Regarding claims 4 and 5, the Office Action's citation to a low-pass filter for improving the fidelity of a protection time slot logic fails to disclose limitations directed to an evaluation of release signals under the influence of a low-pass filter. Regarding claims 6 and 7, the Office Action's citation to an interface to a communications computer does not disclose claim limitations directed to error-state detection that is "resettable from the outside" (claim 6) or "signaled to the outside (claim 7).

The Section 103 rejections of various dependent claims are also improper because the Office Action has failed to provide valid motivation for making the proposed modifications. For instance, the rejection of dependent claim 3 is improper because the asserted motivation for inversely coding the cited trigger signals fails to explain how the trigger signals in the '805 reference could be inversely coded and/or could function as such. The alleged rationale for modifying the '805 reference to arrive at the limitations in claim 3 relies upon an unsupported supposition that one of skill in the art would be motivated "if the design so dictated" or "per a specific set of physical instructions." This alleged rationale fails to provide any evidence in support of the supposed "design" or "physical instructions" (which do not exist). Moreover, it is unclear as to how the '805 reference could use coded trigger signals, much less inversely-coded trigger signals (*e.g.*, it is unclear as to how such signals could be coded or decoded, or accordingly used as a trigger), and the Office Action has provided no rationale regarding the same. Regarding the rejection of dependent claims 4-5, Applicant submits that the asserted motivation, to mitigate "noise or channel transients," is unrelated to the proposed modification and to the claim limitations to which the rejection is directed.

In view of the above, the Section 103 rejections have failed to cite teaching or suggestion of multiple claim limitations in the dependent claims as well. Therefore, the rejections of the dependent claims should also be removed based upon this further lack of teaching.

Regarding the Office Action's suggestions under 37 C.F.R. § 1.77(b), Applicant respectfully declines to add section headings. Such section headings are not statutorily required for filing a non-provisional patent application under 35 U.S.C. § 111(a). The guidelines at 37 C.F.R. § 1.51(d) are only suggestions for applicant's use and are not mandatory. When Rule 77 was amended in 1996, Bruce A. Lehman, Assistant Secretary


of Commerce and Commissioner of Patents and Trademarks, stated in the Official Gazette: "Section 1.77 is permissive rather than mandatory. ... 1.77 merely expresses the Office's preference for the arrangement of the application elements. The Office may advise an applicant that the application does not comply with the format set forth in 1.77, and suggest this format for the applicant's consideration; however, the Office will not require any application to comply with the format set forth in 1.77." See 61 FR 42790, Aug. 19, 1996.

Applicant has added new claims 17-20, and believes that these claims should be allowable over the cited references for reasons including those stated above. Applicant also believes these new claims to be allowable because the cited references fail to disclose, teach or suggest limitations including those directed to evaluating the timing of two independently-generated release signals, and blocking network access when the release signals do not coincide in time. Support for these limitations may be found throughout the specification, with exemplary embodiments described at paragraphs 0015-0020.

In view of the remarks above, Applicant believes that each of the rejections/objections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Aaron Waxler, of NXP Corporation at (408) 474-9068.

Please direct all correspondence to:

Corporate Patent Counsel
NXP Intellectual Property & Standards
1109 McKay Drive; Mail Stop SJ41
San Jose, CA 95131
CUSTOMER NO. 65913

By: 
Name: Robert J. Crawford
Reg. No.: 32,122
Eric J. Curtin
Reg. No.: 47,511
(NXPS.518PA)